

Title (en)
MACHINE WITH REDUCED CYLINDER FRICTION

Title (de)
MASCHINE MIT REDUZIERTER ZYLINDERREIBUNG

Title (fr)
MACHINE AVEC FROTTEMENT DE CYLINDRE RÉDUIT

Publication
EP 3199844 A1 20170802 (EN)

Application
EP 17152046 A 20170118

Priority
GB 201601512 A 20160127

Abstract (en)
A machine having a cylinder (103), the configuration of the machine being such that a body portion (109) of a piston (107) of the machine periodically engages an inner surface (105) of the cylinder (103) during operation of the machine, this engagement defining a contact zone between the body portion (109) of the piston (107) and the inner surface (105) of the cylinder (103), the inner surface (105) of the cylinder (103) having an enhanced bearing region comprising one or more recesses (117) indented into the inner surface (105), the enhanced bearing region being smaller than the inner surface (105) of the cylinder (103) and being substantially centered on the contact zone.

IPC 8 full level
F16J 10/04 (2006.01); **F02F 1/20** (2006.01)

CPC (source: CN EP GB US)
F02F 1/004 (2013.01 - US); **F02F 1/18** (2013.01 - CN); **F02F 1/20** (2013.01 - CN EP GB US); **F02F 3/00** (2013.01 - CN US); **F16C 33/1065** (2013.01 - GB); **F16J 10/02** (2013.01 - GB); **F16J 10/04** (2013.01 - EP US)

Citation (search report)

- [X] US 6041749 A 20000328 - LUEBBING BERND-ERIC [DE], et al
- [X] US 2012186561 A1 20120726 - BETHEL STEVEN J [US], et al
- [A] US 6253724 B1 20010703 - HAN KEUM TAI [KR]
- [A] GB 2431976 A 20070509 - FORD GLOBAL TECH LLC [US]

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 3199844 A1 20170802; CN 107013357 A 20170804; GB 201601512 D0 20160309; GB 2546760 A 20170802; MX 2017001270 A 20180726; RU 2016151590 A 20180702; US 10502157 B2 20191210; US 2017211506 A1 20170727

DOCDB simple family (application)
EP 17152046 A 20170118; CN 201710049411 A 20170123; GB 201601512 A 20160127; MX 2017001270 A 20170127; RU 2016151590 A 20161227; US 201615383769 A 20161219